P21328.P04

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Attorney Docket No.P21328

In re application of

Lean Paul MICHAUT

Box Non-Fee

Group Art Unit: Unlknown

Filed

Serial No.

: I.A. Filed February 15, 2000

Examiner: Unknown

For

: BITUMINOUS UPPER LAYER DRAINING BLANKET

THE COMMISSIONER OF PATENTS AND TRADEMARKS

: 09/913,346

Washington, D.C. 20231

Sir:

Transmitted herewith is a Supplementary Preliminary Amendment in the above-captioned application.

- ____ Small Entity Status of this application under 37 C.F.R. 1.9 and 1.27 has been established by a verified statement previously filed.
- A verified statement to establish small entity status under 37 C.F.R. 1.9 and 1.27 is enclosed.
- X An Information Disclosure Statement, PTO Form 1449, and references cited.

X No additional fee is required.

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The fee has been calculated as shown below:

GROUP 3600

| Claims After Amendment | No. Claims Previously Paid For | Present Extra | Small Entity | | Other Than A Small Entity | |
|-------------------------------------|--------------------------------------|------------------|--------------|-----|------------------------------|--------|
| | | | Rate | Fee | Rate | Fee |
| Total Claims: 20 | *20 | 0 | x 9= | \$ | x 18= | \$0.00 |
| Indep. Claims: 3 | **3 | 0 | x 42= | \$ | x 84= | \$0.00 |
| Multiple Dependent Claims Presented | | | +140= | \$ | +280= | \$0.00 |
| Extension Fees for Month | | | | \$ | | \$0.00 |
| | | | Total: | \$ | Total: | \$0.00 |

^{*}If less than 20, write 20

Please charge my Deposit Account No. 19-0089 in the amount of \$____

N/A A Check in the amount of \$_____ to cover the filing/extension fee is included.

X The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 19-0089.

X Any additional filing fees required under 37 C.F.R. 1.16.

X Any patent application processing fees under 37 C.F.R. 1.17, including any required extension of time fees in any concurrent or future reply requiring a petition for extension of time for its timely submission (37 CFR 1.136)(a)(3).

Neil F. Greenblum Reg. No. 28,394

^{**}If less than 3, write 3

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Jean-Paul MICHAUT

Group Art Unit: Unknown

Appl. No

: 09/913,346

Examiner: Unknown

Filed

: I.A. Filed February 15, 2000

For

: BITUMINOUS UPPER LAYER DRAINING BLANKET

SUPPLEMENTARY PRELIMINARY AMENDMENT

Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

Prior to the calculation of the filing fee for and examination of the above-identified patent application, the Examiner is respectfully requested to amend the specification and claims as follows:

IN THE TITLE

Please change the title from "BITUMINOUS UPPER LAYER DRAINING BLANKET" to

By

WBITUMINOUS DRAINING ROAD BLANKET, ROAD COMPRISING SAME AND

PROCESS FOR PROVIDING ROAD THEREWITH

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IN THE SPECIFICATION

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Page 1, before line 3 but after the title, insert the following:

GROUP 3600

---CROSS-REFERENCE TO RELATED APPLICATIONS

Pr

The present application is a U.S. National Stage of International Application No.

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PCT/FR00/00374 filed February 15, 2000 which claims priority under 35 U.S.C. § 119 of



French Patent Application No. 99/01789, filed on February 15, 1999.

BACKGROUND OF THE INVENTION

1. Field of the Invention---;

Page 1, between lines 5 and 6, insert the following:

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GROUP 3600

Page 2, between lines 17 and 18, insert and center the following:

---2. <u>Discussion of Background Information</u>---;

B

---SUMMARY OF THE INVENTION---;

Page 2, between lines 23 and 24, insert the following:

---In one aspect, the present invention provides a bituminous draining road blanket which comprises an upper partial layer and a lower partial layer. The upper partial layer comprises a modified bituminous binder, aggregate having a first particle size distribution, and 2 to 11 % by weight of filler material. The lower partial layer comprises a bituminous binder and aggregate having a second particle size distribution which is larger than the first particle size distribution.

B

In another aspect, the ratio of the second particle size distribution to the first particle

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size distribution is from about 3:1 to about 4:1. For example, the first particle size distribution may be selected from the ranges 2/4, 4/6 and 6/10. For example, the first particle size distribution may comprise at least 95 % 4/6 range. The second particle size distribution, on the other hand, may be selected from, e.g., the ranges 10/14, 10/20 and 14/20. For example, the second particle size distribution may comprise at least 95 % 10/14 range.

In another aspect, the void ratio of the upper partial layer of the bituminous draining road blanket may be about the same as the void ratio of the lower partial layer thereof. For example, the void ratio may be about 20 % to about 30 % in both of these layers. In another embodiment, the void ratio of both the upper partial layer and the lower partial layer is at least 25 %.

In yet another aspect, the average volume of the voids of the upper partial layer is smaller than the average volume of the voids of the lower partial layer.

In still another aspect, the modified bituminous binder of the upper partial layer comprises road quality bitumen, elastomer, and bitumen containing less than 6 % of saturated products and less than 7 % of asphaltenes. The amount of road quality bitumen may be at least 30 %. The elastomer which may, for example, be present in an amount of at least 3 % may comprise styrene-butadiene-styrene based elastomer.

In an exemplary embodiment of the bituminous draining road blanket according to the present invention, the ratio of the second particle size distribution to the first particle size



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distribution is from about 3:1 to about 4:1, the first particle size distribution is selected from the ranges 2/4, 4/6 and 6/10, the second particle size distribution is selected from the ranges 10/14, 10/20 and 14/20, the void ratio of both the upper partial layer and the lower partial layer is about 25 % to about 30 %, and the modified bituminous binder of the upper partial layer comprises at least 50 % of road quality bitumen, at least 3 % of styrene-butadiene-styrene based elastomer, and bitumen containing less than 6 % of saturated products and less than 7 % of asphaltenes.

The present invention also provides a road having on its surface a draining bituminous blanket as described above.

In one aspect, the thickness of the upper partial layer of the draining bituminous blanket is in the range from 1.5 cm to 2 cm. In another aspect, the thickness of the lower partial layer thereof is in the range from 2.5 cm to 4 cm.

The present invention further provides a process for providing a road surface with a draining bituminous blanket as described above. The process comprises applying, by a road finishing machine, the lower partial layer and the upper partial layer of the draining bituminous blanket in a single pass or in two successive passes.

In one aspect of this process, the layers are applied at a temperature of at least 135 °C.---

